

## **REMARKS**

### **Request for Re-examination:**

A Request for Re-examination is filed herewith.

### **Claim Objections:**

The Examiner objected to the terms “adapted to” and “whereby” in claim 1, stating that such terms do not positively recite structural limitations.

Suitable amendment has been made to remove these terms.

### **Section 103 Rejections:**

#### **(a) The Present Rejections:**

The Examiner rejected the present invention as an obvious combination of Barkley and Shivji. The Examiner stated that Barkey disclosed the present invention with the exception of the following features which the Examiner states are seen in Shivji:

- (a) slots adapted to receive different personality modules;
- (b) each slot being connected to the allocation module by a separate transmission module;
- (c) bandwidth being allocated to personality modules dynamically (with respect to changes both in: (i) types of personality modules, and (ii) bandwidth requirements at different times.); and
- (d) each personality module may reside in any combination in any slot.

(b) The Presently Claimed Invention:

Claim 1 has now been amended to add an **interface circuit positioned between the plurality of personality modules and the allocation module**. As also claimed, this interface circuit controls the direction of data flow between the multiplexer and the plurality of personality modules.

As now claimed, this interface circuit comprises a plurality of bits hardwired to the slots, wherein **each slot has both dedicated data bits and data bits that are shared between neighboring slots**.

These newly claimed features of the invention are clearly seen in Figs. 3 and 4 and are described in detail at para. [0027] of the application (and para. [0033] of published Application US 2002/0163937), as follows.

**Interface circuit (54)** of Fig. 4 is positioned between the plurality of personality modules (28, 30, 32) and allocation module (34) of Fig. 3. Interface circuit (54) controls the direction of data flow between multiplexer (48) and the plurality of personality modules (28, 30, 32). In addition, interface circuit (154) comprises a plurality of bits (60 in Fig. 4). Bits (60) are hardwired into the slots that receive the personality modules.

As now claimed, **each slot has both dedicated data bits and data bits that are shared between neighboring slots**. In one exemplary embodiment, each slot has a total of 11 bits that are routed to it, including some dedicated bits and some bits shared between neighboring slots. However, only one of the slots can use all or part of the shared bits at a given time. With this arrangement, a high bandwidth (up to 297.44Mbps) can be supported in one physical slot by placing a high bandwidth slot next to a lower bandwidth slot. As a result, it is not necessary to increase the physical size of allocation module (34). Moreover, the presently claimed system conserves on cross-connect time while using a two stage multiplexer. This reduces costs and maintains system flexibility.

(c) The Presently Claimed Invention Distinguished:

The presently claimed structure (i.e.: an interface circuit positioned between the plurality of personality modules and the allocation module, with the interface circuit controlling the direction of data flow between the multiplexer and the plurality of personality modules, and with the interface circuit comprising a plurality of bits hardwired to the slots, wherein each slot has both dedicated data bits and data bits that are shared between neighboring slots), is not seen in, or rendered obvious by, the cited references.

Therefore, in view of the foregoing Amendment and remarks, the Applicant respectfully requests that the present rejections be withdrawn and that the presently pending amended claims be allowed.

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**CONCLUSION**

If the Examiner believes that it would facilitate prosecution, Applicants' Attorney, David Heckadon, may be contacted at (415) 875-3266 or at [dheckadon@gordonrees.com](mailto:dheckadon@gordonrees.com).

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1990 and please credit any excess fees to such deposit account.

Respectfully submitted,

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